



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

FEB 13 2012

REPLY TO THE ATTENTION OF:

E-19J

Stephanie Strength  
U.S. Department of Agriculture  
Rural Development, Rural Utilities Service  
1400 Independence Avenue SW  
Mail Stop 1571, Room 2244  
Washington, D.C. 20250-1571

Re: **Draft Environmental Impact Statement for Hampton-Rochester-La Crosse  
Transmission System Improvement Project, Minnesota and Wisconsin –  
CEQ No. 20110422**

Dear Ms. Strength:

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (EIS) prepared by the U.S. Department of Agriculture (USDA), Rural Utilities Service (RUS) and the Dairyland Power Cooperative (Dairyland). The U.S. Army Corps of Engineers (USACE) and U.S. Fish and Wildlife Service (USFWS) are cooperating agencies. EPA conducted this review pursuant to our authorities under the National Environmental Policy Act (NEPA), Council on Environmental Quality regulations (40 CFR Parts 1500-1508), Section 309 of the Clean Air Act, and Section 404 of the Clean Water Act.

In December 2011, Dairyland applied for financial assistance from the RUS for funding to construct approximately 124-148 miles of 345 kV transmission line and related facilities between Hampton, Minnesota and La Crosse, Wisconsin (the proposal). The proposal also includes construction of two connecting 161 kV lines in the Rochester, Minnesota area, with a total length of 44-49 miles. The stated purpose of the proposal is to: 1) improve community reliability of the transmission system in Rochester, Winona, La Crosse and surrounding areas; 2) improve regional reliability of the transmission system; and 3) increase generation outlet capacity.

Based upon the documentation provided, EPA has rated the overall Draft EIS as **Environmental Objections - Insufficient Information (EO-2)**. The Draft EIS does not identify a preferred route. In such cases, EPA rates the environmental impacts of all included potential alternatives. Based primarily on potential impacts to wetlands and wildlife refuges, we have rated the proposed and alternative routes for both Minnesota and Wisconsin as "Environmental Objections" (EO). The No-Action alternative is rated as "Lack of Objections" (LO). With regard to the adequacy of the analysis, we have rated the Draft EIS as "Insufficient Information" (2). Please see the enclosed summary of the rating system used in EPA's evaluation of the document.

The Draft EIS does not fully evaluate and characterize environmental impacts, or define and illustrate the scope of the project as a whole. In our enclosed detailed comments, we identify a number of areas where the Final EIS can better analyze predicted impacts of the practicable alternatives. We are particularly concerned that the route alternatives presented in the Draft EIS do not appear to be analyzed using a consistent set of criteria for including and eliminating alternatives. EPA recommends that the Final EIS clearly identify these criteria.

We also recommend that the Final EIS provide additional information on route alternatives, including a comprehensive discussion of the impacts of each alternative. We also advise that USDA re-evaluate the decision to eliminate the Blair Route as a reasonable alternative, especially as this route alternative could reduce impacts to the Upper Mississippi River National Fish and Wildlife Refuge and the Van Loon State Park. Based on discussions with USDA, we understand that USDA and Dairyland have different preferred routes. If this is the case, EPA advises that the Final EIS clearly state USDA's and Dairyland's preferred route for each segment.

EPA advises that the Final EIS provide additional information on avoidance, minimization and mitigation measures. For unavoidable impacts – including impacts to wetlands, floodplains, sensitive habitat, and National Wildlife Refuge properties – it is essential to discuss actions to minimize, mitigate, and/or compensate for potential impacts. As part of that discussion, EPA recommends that the Final EIS clearly identify the ecological and recreational value of impacted areas and the ability of proposed mitigation measures to replace or offset lost function and values of the impacted resources.

The Final EIS should also more clearly present information on the project and its impacts. We recommend more succinct narrative discussions; improved cross-references; clearer charts, tables and maps describing route alternatives; and references to pertinent information contained in the appendices. We also recommend structuring the Final EIS to reduce its reliance on references to external documents, such as the Minnesota and Wisconsin state EIS documents, the Macro Corridor Study, and the CapX2020 documents. While we recognize that appendices may be included for supplemental reference, we strongly advise that the Final EIS be a stand-alone document that precisely defines the project's purpose and need, describes the alternative route selection process, evaluates the environmental consequences associated with each alternative, and considers appropriate mitigation measures.

We are available to discuss these comments at your convenience. Please feel free to contact me at 312-353-8894, or Shanna Horvatin of my staff at 312-886-7887 or via e-mail at [horvatin.shanna@epa.gov](mailto:horvatin.shanna@epa.gov). Thank you for considering our recommendations to reduce environmental impacts from the project and to improve the quality of the final EIS.

Sincerely,



Alan Walts  
Director, Office of Enforcement and Compliance Assurance

Enclosures: Ratings Definitions  
USEPA Detailed Comments

cc: Thomas Melius, Regional Director, US Fish and Wildlife Service  
Kevin Foerster, Refuge Manager, UMNWFR, US Fish and Wildlife Service  
David Studenski, USACE-St. Paul District  
Dave Schad, Minnesota Department of Natural Resources  
Matthew Langan, Minnesota Dept. of Commerce  
Kevin Molloy, Minnesota Pollution Control Agency  
Robert Fasick, Wisconsin Department of Transportation  
Cheryl Laatsch, Wisconsin Department of Natural Resources  
Kenneth Rineer, Wisconsin Public Service Commission



## US EPA Detailed Comments

### USDA Rural Utilities Service - Draft Environmental Impact Statement for Hampton-Rochester-La Crosse Transmission System Improvement Project, Minnesota and Wisconsin

February 13, 2012

#### PURPOSE AND NEED

1. Page 4 of the Draft EIS states: *“Dairyland identified participation in the Hampton-Rochester-Lacrosse transmission line project as its best course of action in meeting future needs for reliable electric service in the Rochester and Lacrosse area.”*
  - **RECOMMENDATION:** Clarify and provide additional information in the Final EIS on the specific future needs. This includes information regarding timeframes of the future needs which the project is intended to address.
2. Discussions on reliability (p. 55-56) are not clear and discernable. The only information provided is reference testimony (p. 56) to the [“Wisconsin” or “Minnesota”] Public Utilities Commission.
  - **RECOMMENDATION:** Clarify the discussion on reliability in the Final EIS. Provide specific information that relates these issues clearly to the project’s purpose and need. Summarize the referenced testimony in addition to citing an external document.
3. Page 56 of the Draft EIS indicates the “top 10 binding constraints” are the congestion points limiting the usefulness of the (existing) system. However, there is no further discussion in the Draft EIS as to what these congestion points are, where they are located in the system, or how they relate to the proposed project.
  - **RECOMMENDATION:** Clarify how the congestion points relate to reliability and to the project’s purpose and need. Provide a clear location map of the congestion points in order to allow reviewers to understand the congestion points and how they affect reliability as well as the proposed project’s purpose and need.



4. The Draft EIS states that the project is focused on (p. 6) :

*"...meeting identified needs for transmission system reliability and efficiency. A reliable transmission system delivers electricity where it is needed even when some lines or generators are out of service. An efficient system reduces the need for new generating facilities. In an inefficient system, electricity can become trapped within the transmission network (grid) because of congestion or outages and cannot be delivered to all the places where the energy is needed in an efficient system. Thus, these needs to deliver energy must be met alternatively by operating generating facilities that would otherwise not be operated but for the inefficiency of the transmission system."*

The Draft EIS does not illustrate what the system inefficiencies are, nor does it describe the reliability issues in thorough detail. Furthermore, the Draft EIS does not discuss or explain the current system's output, what the current need for capacity is, what the new system is predicted to provide, and how the new system will meet the needs and provide the desired reliability and efficiency.

- **RECOMMENDATION:** Provide additional information on reliability issues, including an explanation of existing inefficiencies and the resulting problems that these inefficiencies are causing. Information regarding the current output and use as compared to the desired output should be listed in the Final EIS.

## **ALTERNATIVES AND PRESENTATION OF INFORMATION**

1. The Draft EIS does not describe how alternatives were eliminated from detailed consideration, and it is also unclear how many alternatives were considered for each portion of the project. While there are references to Appendix R for other Minnesota route alternatives and references to Appendix L for the Wisconsin alternatives, these appendices do not clearly explain how the range of alternatives to be considered was determined. Moreover, the provided figures are not appropriately scaled to provide adequate information for reviewers on the specific locations of all alternatives.
  - **RECOMMENDATION:** Provide further discussion in the Final EIS as to how reasonable alternatives were identified, and information on criteria used to eliminate alternatives from detailed consideration. Clearly depict alternatives for both Minnesota and Wisconsin segments in all relevant maps, charts and graphs. Provide a succinct narrative discussion of each route, the criteria used to evaluate each route, and a summary of the referenced appendices. While the inclusion of appendices is appropriate, pertinent referenced information should be extracted and summarized within the body of the Final EIS.

2. The Draft EIS states that: 17 route alternatives were studied for the Hampton to North Rochester 345 kV line; 16 route alternatives were studied for the North Rochester to Northern Hills 161 kV line; and 31 route alternatives were studied for the North Rochester to Mississippi River 345 kV line. However, no maps, figures, narrative description, or summary tables of impacts were included in the Draft EIS to provide the reader with information regarding route alternatives, their impacts, and why they were or were not eliminated.

- **RECOMMENDATION:** In the Final EIS, provide detailed information describing the alternatives studied for each section of the proposed transmission line, including the criteria and rationale for inclusion or elimination.

3. It is not clear if the Draft EIS proposes a new 345 kV and/or 161 kV line in Wisconsin along one of the noted alternative routes (Arcadia, Q1, Ettrick, Highway 88 connection) in addition to pursuing re-approval of the existing 161 kV Q1 line in its current route.

- **RECOMMENDATION:** Provide clear, unambiguous narrative information and figures depicting the details of the routes for both the 345 kV and the 161 kV transmission lines in Wisconsin.

4. The U.S. Fish and Wildlife Service (USFWS) stated, in correspondence dated December 7, 2011, and December 22, 2011, that the Blair Route is a viable alternative and should be considered in further detail. While the Draft EIS states that the Blair Route is more costly and will result in "additional impacts," the Draft EIS does not contain information regarding those additional impacts. The USFWS has provided several reasons why the Blair route should be considered, including that it:

- a) Appears to follow existing, established 161kV routes across existing easements (where impacts are already present);
- b) Places the greatest distance possible from the Upper Mississippi River National Fish and Wildlife Refuge and Mississippi River (UMRNFWR) corridor, which will reduce avian mortality; and
- c) Would minimize habitat destruction, wetland impacts, and impacts to state lands (Wisconsin Department of Natural Resources' Van Loon Wildlife Area), while crossing primarily agricultural lands (in lieu of forested uplands and/or wetlands).

- **RECOMMENDATION:** Re-evaluate the inclusion of the Blair Route as a reasonable alternative for the purposes of a NEPA analysis. Provide the criteria and rationale for inclusion or elimination.

5. USFWS indicated, in correspondence to the Wisconsin Public Service Commission dated December 22, 2011, that USFWS "does not recognize the original Q1 route as a viable alternative." In the Draft EIS, however, Dairyland states that there is "no practicable

alternative to rebuilding the Q1 line on Refuge property.” It is unclear what is, or is not, proposed to occur in the Black River Bottoms portion of the Upper Mississippi National Fish and Wildlife Refuge (UMRNFWR) property. The Draft EIS is also unclear on whether or not USDA is considering rebuilding the Q1 line in its current location through the Black River Bottoms.

- **RECOMMENDATION:** Clarify whether or not any new construction or rebuilding of the Q1 lines within the Black River Bottoms is proposed. Where USDA and Dairyland disagree regarding the viability of an alternative, those differences should be explicitly identified.
6. During consultation among the USDA project manager, the URS consultant to USDA, and my staff, EPA learned that three alternatives to the existing Q1 route through the Black River Bottoms are being considered (as shown in Figure 2 found in Appendix L of the Draft EIS). USDA also clarified the point that the Draft EIS does not represent a unified opinion between the agency and Dairyland. USDA and Dairyland have varying opinions on the preferred routes.
- **RECOMMENDATION:** The Final EIS should be clear on any alternatives proposed to the existing Q1 route through the Black River Bottoms. The alternatives discussed should be further clarified to ensure transparency. USFWS has indicated, in correspondence to USDA on December 7, 2011, that construction of the 345 kV line on a different route centerline (such as the Blair route) would allow for removal of the existing 161 kV line from Refuge property and is preferred by the USFWS. Additional clarification is needed on proposals for new lines or rebuilding of existing lines to fully evaluate and address impacts to the UMRNWR. The Final EIS needs to represent USDA’s views, as the lead agency issuing the document. Where USDA and Dairyland disagree regarding the viability of an alternative, including differences in preferred routes, those differences should be explicitly identified.
7. Page 130 of the Draft EIS addresses the issues associated with the northern 8 miles of the 161 kV Q1 transmission line corridor near WI-35. This area is designated as the Great River Road (GRR). The Wisconsin Department of Transportation (WisDOT) holds scenic easements for this area. The WDNR, WisDOT, and USFWS have all expressed concerns with this Q1 route particularly relating to aesthetic and environmental impacts along the GRR/WI-35. WisDOT has expressed concerns regarding the feasibility and reluctance to permit the Q1 route along the GRR scenic by-way. Two routes were proposed by the WDNR and WisDOT addressing impacts to the GRR/Wis-35. WisDOT suggested the WI-88 Connector and the WDNR suggested the Arcadia-Ettrick Route alternative. Neither of these route alternatives is examined in detail as a reasonable alternative to the existing Q1 route.



- **RECOMMENDATION:** Re-evaluate the decision to exclude both the WDNR (Arcadia-Ettrick Route) and the WisDOT (WI-88 Route) as reasonable alternatives, and provide a detailed analysis in the Final EIS of both routes. If either agency is not willing to issue a permit for their respective areas, USDA should provide viable options for those segments of the transmission line. For the purposes of a NEPA review, analysis must provide clear information on what criteria were used to make the decision.
8. Page 272 of the Draft EIS discusses a proposal for rebuilding of 69 kV lines.
- **RECOMMENDATION:** Clarify whether reconstruction of any 69 kV lines is part of this proposed project, and if so, describe those proposals and their impacts clearly in the text and accompanying maps.
9. Discussion of the North Rochester Substation (page 122) does not specify what two locations for this substation are under consideration. The Draft EIS is also not clear why 40 acres are needed for this new substation (and other new substations), even though only 8 acres of fenced/graded land is required for substation construction. The proposed Briggs Road substation is noted in several locations in the Draft EIS; however, on page 121 the Draft EIS states “the proposed Briggs Road Substation would be permitted in a separate proceeding before the PSCW.” The Draft EIS is unclear whether or not the environmental impacts of the construction of the Briggs Road substation have been evaluated.
- **RECOMMENDATION:** Provide the possible locations of both the North Rochester Substation and the proposed Briggs Road substation in the Final EIS. Explicit location maps with aerial photo backdrops that show the boundary of each proposed substation location should be included. Information about the environmental impacts, cost analysis and location needs for both the Briggs Road and North Rochester Substations should also be included.
10. The North Rochester to Chester scenario is discussed on pages 128-129. Figure 2-6 shows the location of the three proposed “tap” locations associated with this proposal. This map is unclear, and reviewers cannot determine the proposed Tap 1, Tap 2, and Tap 3 locations based on these figures. Furthermore, six sub-alternative routes were rejected; the Draft EIS only references Appendices O and P for additional information, but does not provide summary information in the EIS.
- **RECOMMENDATION:** Provide detailed information, impact summary tables, and maps of the three tap locations in the Final EIS.

11. The Draft EIS does not state if Lake Byllesby Regional Park will be impacted by any proposed Minnesota route.

- **RECOMMENDATION:** Provide information on whether impacts to the Park can be avoided or minimized (e.g., reducing tree or shrub removal).

12. Routes 1P and 1A both propose crossing through significant sites, including the Richard J. Dorer State Forest, the Lake McCarthy Wildlife Management Area, several Biodiversity Sites of Medium Significance, and within the influence of two Zoological National Heritage Sites. The Draft EIS states that Land and Water Conservation Funds have been used for portions of these areas, including the Snake Creek Management Unit of the Richard J. Dorer State Forest.

- **RECOMMENDATION:** Provide information describing how these sites can be avoided in the Final EIS. For impacts determined to be unavoidable, provide information on how impacts will be minimized and mitigated.

#### **WETLAND/WATERS CONCERNS**

1. The Draft EIS does not discuss how the mitigation sequence established by the Clean Water Act Section 404(b)(1) Guidelines has been applied. Under the mitigation sequence, potential impacts must first be avoided to the maximum extent practicable; remaining unavoidable impacts must then be minimized, and finally compensated for to the extent appropriate and practicable. The Draft EIS does not contain clear narrative or figures addressing wetland impacts (filling and conversion of forested to non-forested wetland).

- **RECOMMENDATION:** Provide information pertaining to the proper sequence of mitigation for impacts to waters per the Clean Water Act Section 404(b)(1) Guidelines. Mitigation for permanent wetland impacts (fill) and wetland conversion should be discussed.

2. The Draft EIS does not succinctly summarize wetland impacts for the entire project. Discussion of wetland impacts, either permanent (due to fill and/or conversion) or temporary, is unclear and is divided into separate discussions for Minnesota and Wisconsin. A summary statement on page 257 refers reviewers to "Table 2- ." (*sic*); however there is no table with summary numbers for wetland impacts for the entire project.

- **RECOMMENDATION:** Provide a complete summary table with detailed wetland impacts for the entire project (and all routes) based on the alternative routing combinations. Provide information on avoidance and minimization measures taken to reduce wetland impacts, specific mitigation ratios for wetland impacts, and conceptual wetland mitigation plans for permanent wetland impacts.

3. Temporary and/or permanent impacts to streams, rivers, lakes, wetlands, and other waters of the U.S. are expected during construction. Approximately 1,000 acres could or will be disturbed during construction (p. 180). Construction impacts include access roads, staging areas, grading, upgrading or creating routes, etc.

- **RECOMMENDATION:** Include an estimation of impacts associated with these temporary construction/access needs in the Final EIS.

4. Limited or no information is available in the Draft EIS pertaining to:

- 1) Floodplains (Section 3.2.3.2, p. 193);
- 2) Sensitive Wetlands (Table 3-4, p. 211-213) *This section only provides information for wetlands impacts associated with the Q1/Hwy 35, Arcadia and Q1/Galesville routes. There is no indication if there are sensitive wetlands impacted by other routes;*
- 3) Cumulative Effects (Section 4.4.2, p. 244). *No information is provided, particularly in areas of prior wetland conversion and/or filling;*
- 4) Surface Water, General (p. 183) *This section mentions only large rivers, and does not mention crossings of smaller streams/tributaries, including temporary crossings;*

The Draft EIS fails to provide a complete and comprehensive analysis of wetlands and water bodies. There is not enough information in the above-listed sections to determine if there will be impacts and what the extent of those impacts might be. Floodplains, sensitive wetlands (such as Ramsar Wetlands of International Importance), and cumulative impacts to wetlands are not adequately discussed in the Draft.

- **RECOMMENDATION:** Provide a comprehensive analysis of impacts to waters of the U.S., including wetlands, in the Final EIS.

5. The existing Chester substation is proposed to be expanded by one acre (p. 123). The existing substation is located on the east side of 50<sup>th</sup> Ave SE (Route 11), north of Highway 14 East and north of railroad tracks, which is not clear in the Draft EIS. EPA's review of aerial photography and the National Wetland Inventory (NWI) Maps shows that wetland impacts may occur to due substation expansion. The NWI maps show wetlands to the north and east of the existing substation; additionally, wetland signatures were shown in aerial photography. However, the Draft EIS does not discuss wetland impacts associated with this substation expansion, or with construction of any new substations.

- **RECOMMENDATION:** Clearly describe all aquatic impacts associated with expanding the Chester Substation.



6. In Section 3.2.1.3 (Impaired Waters, p. 185), the Draft EIS does not determine if any impacted water bodies listed under Section 303(d) of the Clean Water Act are present in the project boundaries.
  - **RECOMMENDATION:** Provide a list of impaired water bodies that may potentially be impacted by the project. Explain how those impacts may affect water quality in the surrounding vicinity.
7. In Section 3.2.2.2 (Construction Impacts on Water Quality and Streams, Page 190), the Draft EIS does not clearly discuss potential impacts to rivers, streams, and wetlands resulting from the installation of transmission line poles, from construction of access roads and temporary stream crossings, and from temporary wetland fill/crossings, etc. Restoration measures for temporary impacts were also not included in the Draft EIS.
  - **RECOMMENDATION:** In the Final EIS, discuss potential impacts to rivers, streams, and wetlands due to the installation of poles, from the construction of access roads and temporary stream crossings, and from temporary wetland fill/crossings, etc. Include a discussion of restoration measures for temporary impacts.
8. Section 3.2.3.1 (Streams, p. 193) of the Draft EIS does not discuss avoidance of, and minimization of, temporary impacts to streams from construction of access roads and temporary stream crossings, and from temporary wetland fill/crossings, etc.
  - **RECOMMENDATION:** Provide a discussion on potential temporary stream crossing and temporary stream impacts, including measures to restore temporary impacts.
9. Section 4.2.2 (Water Resources, unavoidable adverse impacts, Page 334) of the Draft EIS states, "the proposal will not result in discharges to water resources..." This statement appears to be inaccurate, as the Draft EIS indicates elsewhere that there will be impacts (fill) to wetlands and possibly to rivers/streams or other regulated water bodies.
  - **RECOMMENDATION:** The Final EIS should clarify this statement and accurately discuss proposed discharges of pollutants to wetlands, streams, rivers, lakes, and other regulated water bodies.
10. The Draft EIS is unclear if any wetland delineation studies have been completed to determine potential acreages of impact for any of the proposed routes. It appears that potential wetland locations, and therefore potential wetland impact acreages, have been based on the National Wetland Inventory maps. Wetland and waterway delineations should be completed for all alternatives so potential impacts can be accurately assessed.



In discussions between EPA and USACE on February 2, 2012, EPA learned that a meeting will likely be scheduled with USACE, Dairyland, and their consultant(s) at some point in February 2012 to discuss delineation requirements and expectations.

- **RECOMMENDATION:** Provide more detailed wetland and waterway delineations for all alternatives in the Final EIS to ensure that potential impacts can be accurately assessed. Include information pertaining to coordination with USACE.

### **PRESENT ENVIRONMENT AND EFFECTS OF ALTERNATIVES – Biological Resources**

1. The Draft EIS notes that the project area encompasses several “Important Bird Areas” (IBAs), in addition to other important bird habitat types, such as upland forests, the Mississippi River corridor and its associated floodplains, and other lake and riverine areas, such as Lake Byllesby and the Black River Bottoms. The Draft EIS also states, “The primary potential impacts for birds are loss of habitat through tree clearing and collision with power lines.” (p. 257) and “Since these are high quality habitat areas, forest removal at these areas would likely have the most potential impact on other wildlife as well” (p. 257). The proposed project would involve permanent impacts to several of these habitats, including IBAs, sites designated by MnDNR as biodiversity sites of medium, high or outstanding significance, and/or Natural Heritage Sites.
  - **RECOMMENDATION:** Provide a clear discussion of impacts to sensitive habitats, including all measures employed to avoid or minimize impacts to these areas.
2. USFWS refuge lands protect “irreplaceable” (p. 222) habitats and species. The Draft EIS does not include an exhibit showing USFWS’s Resource Classifications. Without an exhibit showing the USFWS Resource Classifications in relation to the proposed routes, reviewers cannot determine the extent of impacts to high value and “irreplaceable” resources.
  - **RECOMMENDATION:** Include in the Final EIS an exhibit of Resource Classification lands in relation to proposed routes, and discuss measures taken to avoid impacts to USFWS refuge lands.

## **PRESENT ENVIRONMENT AND EFFECTS OF ALTERNATIVES – Federally-Listed Species**

1. The analysis of impacts to federally-threatened or endangered species states: “MRP and CPCN Applicants are responsible for protection of legally-protected species and are working closely with the USFWS, the MnDNR, and WDNR to avoid impacts. Information in the Draft EIS is based on published records and is intended to be a general discussion of potential impacts and not all-inclusive. If USFWS, MnDNR, and WDNR determine that field surveys are needed for any particular species, MRP and/or CPCN Applicants will work with the applicable agency to conduct appropriate surveys.” (p. 237). The Draft EIS indicates that further evaluation for the presence of several federally-listed species under the Endangered Species Act (ESA) (p. 267).
  - **RECOMMENDATION:** We recommend that the Final EIS clarify the responsibilities of USDA under Section 7 of the Endangered Species Act, recognizing that federal agencies have different responsibilities than project applicants. EPA recommends that USDA include a Biological Assessment as an Appendix to the Final EIS. At a minimum, the Final EIS should summarize USDA actions taken (to date) as of the Final EIS to comply with the ESA. Including, consulting with USFWS, and should include any conclusions from USFWS regarding potential impacts to threatened and endangered species.
2. The Draft EIS states, “*No activity is planned within any watercourses. If this changes, additional evaluation would be needed for federally-listed aquatic species, especially for the Mississippi River and other streams within Upper Mississippi National Wildlife and Fish Refuge and the Trempealeau National Wildlife Refuge.*” (p. 238) However, while the Draft EIS states that crossings of most or all smaller stream crossings will be spanned, it appears that transmission line poles may potentially be required to be placed within the Mississippi River.
  - **RECOMMENDATION:** The Final EIS should clarify if the entire river can be spanned with no installation of poles required. If any fill (including permanent or temporary crossings) is required within the Mississippi River, the Final EIS should discuss coordination with USFWS regarding the potential for impacts to Federally-listed threatened or endangered aquatic species, such as mussels or fish.

## **PRESENT ENVIRONMENT AND EFFECTS OF ALTERNATIVES – State-Listed Species**

1. Table 2-4, Comparison of Minnesota Routes 1P and 1A shows listed species for Minnesota that may be found within the 150’ right-of-way for routes 1P and 1A. This table does not include state-listed species within the 150’ right-of-way for all alternate routes. This information, which was not included for all routes, is necessary to determine potential impacts to state-listed species, and should be taken into account in determining the feasibility of each route.

- **RECOMMENDATION:** Table 2-4 should be revised in the Final EIS to include state-listed species information within the 150' right-of-way for all alternate routes in Minnesota.
2. Minimal information is provided concerning state-listed species, including: Loggerhead shrike (*Lanius ludovicianus*); Paddlefish (*Polydon spathula*); Indian-plantain (*Cacalia suaveolens*); Tuberous Indian-plantain (*Arnoglossum plantagineum*); and Timber rattlesnake (*Crotalus horridus*).
- **RECOMMENDATION:** Include an analysis of potential impacts to state-listed species and avoidance measures in the Final EIS, as well as a summary of consultations with the MnDNR and the WDNR.

Additionally, include the following information in the Final EIS:

- 1) A rationale for the statement that “no impacts would be expected” to the paddlefish.
- 2) Information on whether or not habitat for the Indian-plantain, and all other state-listed species, is found within any of the project rights-of-way. If habitat is present for any state-listed species in any rights-of-way, include plans for surveys and coordination with MnDNR and WDNR.
- 3) If species are determined to be present, specify measures that will to be taken to protect those species from take (due to both human interaction and construction equipment) during construction.
- 4) For all state-listed species, provide documentation of coordination with MnDNR and WDNR.
- 5) Discuss potential impacts to upland forests, remnant prairies, or other unique habitats and how impacts can be avoided and, where unavoidable, minimized and mitigated.

## **PRESENT ENVIRONMENT AND EFFECTS OF ALTERNATIVES – Natural Communities**

1. The Draft EIS states: “Permanent vegetation changes would take place...within the ROW that occurs in the forested communities.”
  - **RECOMMENDATION:** Include information to clarify what is meant by “permanent vegetation changes.” Discuss the potential to decrease impacts to forested areas by maintaining woody vegetation to a certain maximum height under the power lines, allowing the majority of woody habitat to remain relatively untouched at the forest floor. While exceptions for access roads and other areas may be required, provide a description of such areas and supporting rationale.



2. The Draft EIS indicates that in many cases, impacts to areas containing native vegetation communities could be avoided by spanning these areas; however, the Draft EIS also states that this avoidance measure would not apply to forested areas.
  - **RECOMMENDATION:** Discuss the ability to decrease impacts to communities such as prairies and non-forested wetlands by spanning these areas. Consider the feasibility of minimizing the number of required structures in order to span native vegetation communities and thus reduce impacts.
3. The Draft EIS states that Route 1P would require clearing of 3,000' of the edge of a MnDNR Biodiversity Site of High Significance maple-basswood forest south of Butler Creek on US 52 (page 241). In addition to this significant forest clearing, the project will require clearing of trees in several other areas. Mitigation for the clearing of these forested areas is not discussed in the Draft EIS.
  - **RECOMMENDATION:** Discuss a conceptual mitigation plan to compensate for the proposed forest clearing activities. Including strategies for the replanting of appropriate native tree species and age classes in coordination with both the MnDNR and the WDNR.
4. The Draft EIS does not discuss potential impacts to MnDNR biodiversity sites, and only mentions the locations of MnDNR biodiversity sites.
  - **RECOMMENDATION:** Clarify the potential for impacts to Minnesota biodiversity sites in the Final EIS. Consider the abundance and locations of high-quality habitats when determining potential route locations.

#### **PRESENT ENVIRONMENT AND EFFECTS OF ALTERNATIVES – Invasive Species and Noxious Weeds**

1. The Draft EIS indicates that Wisconsin regulations require implementation of Best Management Practice, including post-construction monitoring and infestation control, to control invasive species. A list of BMPs is included on page 270 to reduce the spread of invasive species and noxious weeds.
  - **RECOMMENDATION:** Provide additional documentation regarding BMPs to be used in Minnesota, and consider the feasibility of committing to these BMPs for all construction and maintenance activities.



## **PRESENT ENVIRONMENT AND EFFECTS OF ALTERNATIVES – Power Line Collisions**

1. The Draft EIS indicates that guy wires are often used to support poles at locations where the line changes direction and in areas with difficult access (in order to reduce the structure size). However, it is also clear that guy wires can present bird hazards.
  - **RECOMMENDATION:** Discuss where guy wires could be used and how their use may detrimentally affect avian species. If impacts to birds are likely due to the guy wires' proximity to habitat used by birds, further discussion should focus on measures to be taken to avoid or minimize impacts.
2. The Draft EIS states that birds most often strike shield wire, which is the highest and thinnest wire. These wires are needed to conduct current from lightning strikes to the ground, and removal of the shield wire in the Midwest is not a feasible alternative.
  - **RECOMMENDATION:** Discuss whether bird flight diverters or other forms of alerting could be used on the shield wire to alert birds and avoid detrimental impacts to avian species. Consultation with USFWS on this subject is suggested; include information on consultation efforts in the Final EIS.
3. The Draft EIS indicates two areas of concern for potential bird-power line collisions as being the Upper Mississippi/Trempealeau Refuges and Lake Byllesby. It is unclear whether information and analyses provided in the Draft EIS have been reviewed by or received concurrence from USFWS. In particular, the Draft EIS did not specify whether USFWS concurs with conclusions stated on pg. 260 concerning potential impacts from power line collisions and specific conclusions regarding individual species. Furthermore, the conclusions stated in Section 3.5.2.4 - Birds and Other Wildlife Resources are counter to the facts that USFWS stated in correspondence to the Wisconsin Public Service Commission dated December 22, 2011.
  - **RECOMMENDATION:** Provide information concerning consultations with USFWS concerning impacts to the Refuges and Lake Byllesby.
4. Page 260 of the Draft EIS, regarding the discussion about trumpeter swans and power line collisions, states, "Mitigation measures may be taken if at-risk trumpeter swans are identified in other parts of the Proposal area, especially in Minnesota."
  - **RECOMMENDATION:** Discuss the types of impacts that would trigger the need for mitigation measures, and what types of mitigation measures might be employed. Clarify which agencies the applicant would work with to address mitigation requirements for trumpeter swans and/or any other affected avian species.

5. Page 264 of the Draft EIS, regarding the discussion about great blue herons and power line collisions, states, “FWS...recommends marking river crossings with bird flight diverters, not only in areas of deep open water, but also in marshy wetlands where herons and egrets are likely to gather.” However, the Draft EIS does not discuss whether “bird flight diverters” will be used for mitigation.

- **RECOMMENDATION:** Discuss the feasibility of using bird flight diverters at all river crossings, including adjacent floodplain wetlands. Include results of discussions with USFWS in the Final EIS, and provide figures and maps illustrating specifically where diverters will be employed.

6. The Draft EIS references Edison Electric Institute’s Avian Power Line Interaction Committee (APLIC) guidelines to be instituted for reconstruction of 69 kV lines; use of these guidelines is proposed to prevent electrocution of eagles and other raptors.

- **RECOMMENDATION:** Provide clarification on whether APLIC guidelines will be applied to the proposed reconstruction of 161 kV lines and for construction of new 345 kV lines. Provide clarification whether reconstruction of any 69 kV lines will be required, and provide revised/supplemental figures to depict locations of any necessary reconstruction.

7. The proposed project is located within important migratory bird flight paths. However, the Draft EIS does not discuss lights that may be located on the proposed towers.

- **RECOMMENDATION:** Discuss if lights that may be located on proposed towers will impact bird migration; provide information on the color of lights to be used, and whether lighting would be continuous or intermittent. Provide results of coordination with USFWS and the Federal Aviation Administration to ensure that the best possible lighting solutions are employed to reduce avian impacts while ensuring aviation safety.

## **FIGURES AND MAPS**

1. Figure 2-2 (p. 93) is missing the route of the proposed 161kV line from the proposed North Rochester substation to the existing Chester substation.

- **RECOMMENDATION:** Provide a revised figure in a Final EIS that includes this information.

2. Figure 2-13 (p. 124) is missing the route of the proposed 161 kV line from the proposed North Rochester substation to the existing Chester substation. As this figure shows the “route alternatives evaluated in EIS,” it would appear that the Minnesota state EIS did not study impacts associated with this portion of the proposed line.
  - **RECOMMENDATION:** Clarify whether or not impacts associated with this portion of the proposed line have been evaluated in the Draft EIS.
3. An aerial photograph of the Alma Mississippi River crossing was not provided.
  - **RECOMMENDATION:** Include an additional figure in the Final EIS containing this information.
4. Appropriately-scaled exhibits are necessary to understand the relation between routes and resources (e.g., habitat, water bodies, wetlands, residences, etc.).
  - **RECOMMENDATION:** Include additional figures in the Final EIS depicting this information.

### **AIR QUALITY IMPACTS**

1. The Draft EIS states that there will be direct and indirect impacts on air quality, but does not discuss measures to reduce these impacts.
  - **RECOMMENDATION:** Provide information on potential mitigation measures, such as the use of low diesel fuel, anti-idling policies, etc., for all construction equipment and vehicles, as well as control measures for fugitive dust during construction. Provide monitoring plans or Best Management Practices (BMPs) for National Ambient Air Quality Standards (NAAQS) criteria pollutants.
2. Air Quality Impacts related to construction traffic, machinery and equipment can affect the surrounding communities, sensitive populations and construction workers exposed to resulting diesel emissions. The National Institute for Occupational Safety and Health (NIOSH) has determined that diesel exhaust is a potential human carcinogen.. In addition, acute exposures to diesel exhaust have been linked to health problems such as eye and nose irritation, headaches, nausea, and asthma.
  - **RECOMMENDATION:** Although every construction site is unique, common actions can reduce exposure to diesel exhaust. Consider the following measures for periods when machinery or equipment are emitting diesel exhaust for either transmission line or substation construction:
    - Using low-sulfur diesel fuel (less than 0.05% sulfur);



- Retrofitting engines with an exhaust filtration device to capture diesel particulate matter before it enters the construction site;
- Positioning the exhaust pipes so that diesel fumes are directed away from the operator and nearby workers;
- Ensuring adequate ventilation if diesel equipment is operated indoors;
- Using enclosed, climate-controlled cabs pressurized and equipped with high efficiency particulate air (HEPA) filters to reduce operators' exposure to diesel fumes;
- Maintaining all diesel engines, via the manufacturer's recommended maintenance schedule and procedures, to keep exhaust emissions low;
- Turning off engines when vehicles are stopped for more than a few minutes; and training diesel-equipment operators to perform routine inspection and maintenance of filtration devices;
- When purchasing a new vehicle, ensuring that it is equipped with the most advanced emission control systems available;
- With older vehicles, using electric starting aids such as block heaters to warm the engine, avoid difficulty starting, and thereby reduce diesel emissions; and
- Using respirators to control exposure to diesel emissions.

## **NOISE**

1. The Acoustic Environment section (Section 3.4) of the Draft EIS addresses noise impacts due to construction and audible noise from high-voltage transmission lines. Minnesota has state noise regulations, while the state of Wisconsin does not. There are various townships and municipalities that have noise ordinances within the proposal area, such as the City of La Crosse (page 137, Section 3.4.1). The Draft EIS states on page 198 that, *"where guidelines are less stringent or less specific, USDA will follow the standards established the U.S. Department of Housing and Urban Development (HUD)."*

- **RECOMMENDATION:** Provide a list of all sources of noise, including sources due to construction, as well as their anticipated decibel levels. Provide a map of potential receptors, as well as additional information on the locations of noise receptors, in relation to sensitive populations such as schools, nursing homes, hospitals, and residential homes. Provide information as to how the Applicant plans to arbitrate, should the listed receptors find the noise threshold exceed the Minnesota Pollution Control Agency Standards, local township standards, or HUD standards. Construction noise levels should also be taken into consideration for all construction workers, and proper regulatory standards should be adhered to.



## **OTHER ISSUES**

1. Section 3.9.1.3 (Archaeological Resources, p. 304) states that field surveys with State Historic Preservation Office (SHPO) and Tribal Historic Preservation Office (THPO) were conducted, and that several sites along route were identified to be historically or tribally significant. No documentation of these sites or information concerning “ongoing” discussions was provided in the Draft EIS.
  - **RECOMMENDATION:** Provide results of consultation with SHPO and THPO in the Final EIS.
  
2. In the Draft EIS Visual depictions of route corridors, land type identification, residential/commercial areas, roadways and other topographical information was not sufficient.
  - **RECOMMENDATION:** Provide GIS shapefiles/geodatabases outlining all routes, including eliminated routes, on a CD or by download from a provided web link for Final EIS.

